

of the valves of the arteries, veins, and some other portions of the human structure; they were therefore, in principle, as *old* as the creation of man.

These valves, he observed, are applicable generally, to all the purposes of ordinary valves, but particularly so to flexible tubes; in which application they are now presented in syringes of an economical form.

Mr. Peale then desired permission to state the advantages which he believed these valves possessed, and for which letters patent of the United States had been granted to him, the drawings with which exhibited their structure fully, and were now presented for inspection.

1. Their extreme simplicity of form, and economy of construction.
2. Their non-liability to injury, as they may fall, be bent, or even beaten or trodden upon, without derangement.
3. Their indestructibility, except by agents that would destroy the whole fabric or instrument.
4. Their operation in any position, vertical, horizontal, or upside down.

Mr. Peale then showed the practical operation of valves constructed according to this mode, as applicable to various purposes.

Stated Meeting, March 20.

Present, seventeen members.

Prof. CRESSON, Vice-President, in the Chair.

Letters were read:—

From the Natural History Society at Emden, dated Oct. 2, 1856, on transmitting a donation to the Library:—

From the Linnean Society, dated Soho Square, London, Nov. 25, 1856, returning thanks for Nos. 53, 54, of the Proceedings of this Society:—

From the Massachusetts Historical Society, dated Boston, Feb. 19, 1857; and from the Smithsonian Institution, dated Washington, March 6, 1857, acknowledging the receipt of No. 56 of the Proceedings: and—

From Mr. E. Godfrey Rehrer, dated Harrisburg, March 2,

1857, on presenting certain manuscripts relating to the early history of the Society.

The following donations were announced:—

FOR THE LIBRARY.

- Transactions of the Linnean Society of London. Vol. XXII. Part 1. 1856. 4to.
- Journal of the Proceedings of the Linnean Society of London: *Botany*. Vol. I. Nos. 1, 2, 3. *Zoology*. Vol. I. Nos. 1, 2, 3. With list of the Society for 1856. London. 8vo.—*From the Society*.
- Ein und vierzigster Bericht der Naturforschenden Gesellschaft in Emden, für 1855. Emden. 8vo.—*From the Nat. Hist. Society, Emden*.
- Quarterly Journal of the Chemical Society. Vol. IX. No. 4. London, Jan. 1857. 8vo.—*From the Society*.
- Bulletin de la Société de Géographie. IV. Série. Tome XII. Paris, 1857. 8vo.—*From the Society*.
- Flora Batava, of Afbeelding en Beschrijving van Nederlandsche Gewassen. Aflevering 180. Amsterdam. 4to.—*From the King of Holland*.
- Proceedings of the Boston Society of Natural History. Vol. VI. No. 6. Feb. 1857. 8vo.—*From the Society*.
- Journal of the Franklin Institute. Third Series. Vol. XXXIII. No. 3. March, 1857. Philadelphia. 8vo.—*From the Institute*.
- Twenty-first Annual Report of the Executive Committee of the Young Men's Association of the City of Buffalo: with a Record of the Proceedings of the Association. Buffalo, 1857. 8vo.—*From the Association*.
- African Repository. Vol. XXXIII. No. 3. March, 1857. Washington. 8vo.—*From the American Colonization Society*.
- Report of the Secretary of the Treasury on the Finances of the United States, for the year ending June 30, 1856. Washington. 8vo.—*From the Hon. J. R. Tyson*.
- Report of the Superintendent of Common Schools of Pennsylvania, for the year ending June 2, 1856. Harrisburg. 8vo.—*From the Hon. A. G. Curtin*.
- Recherches expérimentales sur la Physiologie et la Pathologie des Capsules surrénales: par le Dr. E. Brown-Sequard, Lauréat de l'Académie des Sciences, &c. Paris, 1856. 8vo.—*From the Author*.
- The Navy of the United States, from the commencement, 1775 to

1853; with a brief history of each vessel's service and fate, as appears upon record. Compiled by Lieut. George F. Emmons, U. S. N. &c. &c. Washington, 1853. 4to.—*From the Author.*
 Report of the State Librarian to the Legislature of Pennsylvania, with a Catalogue of Books for 1856. Harrisburg. 8vo.—*From James J. Barclay, Esq.*

Dr. Le Conte announced the death of Prof. J. W. Bailey, a member of this Society, who died at West Point, N. Y. on the 26th of February last.

Prof. Trego laid upon the table a number of specimens of crystallized slags from the Glendon iron works, at Easton, Pennsylvania.

These crystals have generally the primary and modified forms common to the varieties of the mineral called *augite* or *pyroxene*, which is a silicate of lime and magnesia. The specimens have not been analyzed; but from the form and structure of the crystals, Prof. Trego was inclined to consider them as similar in composition to augite. The limestones in the vicinity of Easton generally contain a portion of magnesia, and used as a flux in the furnace would supply lime and magnesia, with perhaps some silica, while the ore would afford silica and iron; thus furnishing the necessary ingredients for the formation of a substance similar in composition, as well as in crystallization, to augite.

A discussion ensued, in which a number of the members took part, on the effects of magnesian limestones when used as a flux for iron ores, and on the operation of lime burned from them when applied as a manure for soils and for other purposes.

On motion of Dr. William Harris, it was agreed that a committee be appointed to consult with Mr. J. R. Lambdin, relative to the painting of a portrait of the late Dr. E. K. Kane, and to report to the Society at a future meeting. Dr. W. Harris, Mr. Justice, and Prof. Trego, were appointed as the committee.

Several manuscripts sent to the Society by Mr. E. Godfrey Rehrer were laid upon the table. They consist of an original subscription book, dated July 4, 1786, for raising funds to

erect the Society's Hall, on Fifth street below Chestnut; a paper containing the names of subscribers towards the payment of the expenses of Andrew Michaux, on a journey of discovery to the western country; with some other papers containing memoranda of financial affairs.

Stated Meeting, April 3.

Present, ten members.

Judge KANE, President, in the Chair.

Letters were read:—

From Dr. Nathaniel B. Shurtleff, dated Boston, March 21, 1857, acknowledging the receipt of notice of his election as a member of the Society: and—

From the Rev. Henry A. Boardman, dated Philadelphia, March 25, 1857, asking to be excused from his appointment to prepare an obituary notice of the late Dr. Elisha K. Kane.

The following donations were announced:—

FOR THE LIBRARY.

Proceedings of the Boston Society of Natural History. Vol. VI.

Nos. 7, 8. March, 1857. Boston. 8vo.—*From the Society.*

Report of the Twenty-fifth Exhibition of American Manufactures, held in the City of Philadelphia, from 11th to 29th Nov. 1856, by the Franklin Institute of the State of Pennsylvania, &c. Philadelphia. 8vo.—*From the Institute.*

Report of the Secretary of the Treasury, transmitting a Report from the Register of the Treasury, of the Commerce and Navigation of the United States, for the year ending June 30, 1856. Washington. 8vo.

Report of the Commissioner of Patents, for the year 1855. *Arts and Manufactures.* Vols. 1, 2. Washington. 8vo.—*From the Hon. J. R. Tyson.*

Address delivered at the University of Pennsylvania, before the Society of the Alumni, on the occasion of their Annual Celebration. Dec. 10, 1856. By the Hon. George Sharswood, L.L.D. Philadelphia. 8vo.—*From the Author.*